PROPOSAL EVALUATION

Proposition 84 Integrated Regional Water Management (IRWM) Grant Program

Implementation Grant, Round 2, 2013

Applicant	San Diego County Water Authority	**Amount Requested**	$ 10,511,225
Proposal Title	San Diego IRWM Implementation Grant Proposal – Round 2	**Total Proposal Cost**	$ 31,886,921

PROJECT SUMMARY

The proposal consists of the following projects: (1) North San Diego County Regional Recycled Water Project – Phase II; (2) Turf Replacement and Agricultural Irrigation Efficiency Program; (3) Rural Disadvantaged Community Partnership Program; (4) Failsafe Potable Reuse at the Advanced Water Purification Demonstration Treatment Facility; (5) Sustaining Healthy Tributaries to the Upper San Diego River; (6) Chollas Creek Integration Project – Phase II; and (7) Implementing Nutrient Management in the Santa Margarita River Watershed – Phase II.

PROPOSAL SCORE

Criteria	Score/ Max. Possible	Criteria	Score/ Max. Possible
Work Plan	9/15	Technical Justification	6/10
Budget	3/5		
Schedule	5/5	Benefits and Cost Analysis	15/30
Monitoring, Assessment, and Performance Measures	2/5	Program Preferences	8/10
		Total Score (max. possible = 80)	**48**

EVALUATION SUMMARY

WORK PLAN

The criterion is less than fully addressed and documentation or rationales are incomplete or insufficient. The work plan contains an introduction that includes: goals and objectives of the proposal and how they relate to the IRWMP, a tabulated overview for all projects were provided, maps for each project location, and a discussion of linkages between projects. Tasks are described but not with adequate detail, especially in sections pertaining to construction work. For example project 1 has ten components. Each component is laid out and most of the remaining work is construction related. The construction detail for a majority of the components simply consists of a list of items such as site work, excavation, concrete well structure, pumps (without sizes) etc., with no explanation of how the actual construction will be done, leaving a question of whether the components can be fully implemented. Deliverables are provided as basic progress reports, final reports, and technical memorandums. There are no data management or monitoring deliverables provided throughout the work plan. The applicant states that there are economic incentives for customers but does not

go into detail as to what this entails. Also, for project 6 it is unclear whether the creek realignment portion of the project is consistent with the San Diego Water Board Basin Plan. The proposal does not clearly describe how the Chollas Creek will be realigned.

BUDGET

Budgets for more than half of the projects in the proposal have detailed cost information but not all costs appear reasonable or supporting documentation is lacking for a majority of the budget categories. Descriptions of how costs were derived were lacking supporting documentation. For example, project 1 component 1-7 (page 4-24) states that a "local pipe supplier provided a detailed cost estimate for the pipeline material." However, this estimate is not provided. On page 4-6 for Task 5 $96,000 is being requested as grant funding based on Santa Fe Irrigation District's experience with similar projects but no backup documentation is provided. On page 4-39 task 2 – Labor Compliance, costs for this task are $14,042 but there is no actual deliverable listed in the work plan. Some costs appear unreasonable; for example project 6 includes $10,000 for student water quality monitoring stipends, yet the description on page 7-80 in the technical justification section states, "sampling will be conducted by 30 student volunteers." It is unclear whether these students are in fact volunteers learning and being educated on water issues in the area or are in fact being employed. Project 4 has mileage incorporated into Subtask 5.1a. Travel expenses, which are not allowed, are also embedded in subtask 4.1 and subtask 4.2 of project 7. Table 4-50 (page 4-73) budgets money ($67,540) to pay for a staff member of the San Diego RWQB to attend meetings, which is not allowed. Also, reviewer does not see a rationale for how the applicant determined their contingency rate.

SCHEDULE

The schedule is consistent with the work plan and the budget, reasonable and demonstrates a readiness to begin construction or implementation of at least one project in the proposal no later than October 2014. The earliest of the projects begins construction October 2013.

MONITORING, ASSESSMENT, AND PERFORMANCE MEASURES

The criterion is marginally addressed and documentation is incomplete and insufficient. The targets provided for the projects are not measurable. Targets such as "reduce recycled water," or "reduce WWTP discharge," or "reduce reliance on imported water supplies," or "reduce energy consumption" do not provide a means of measuring progress, as they do not identify a baseline condition, specific percent reduction, or numeric milestone the project is attempting to achieve. For example, the goal for project 1 is to reduce greenhouse gas (GHG) emissions associated with water use and enhance resource stewardship and the target is to replace existing infrastructure to recycled water. However, the applicant does not specify how replacing existing infrastructure will reduce GHG emissions. Many of the measurement tools and methods are not consistent with the identified targets making it difficult to determine if they would indeed be sufficient to measure project performance. Many of the desired outcomes do not relate to the project goal.

TECHNICAL JUSTIFICATION

The proposal appears to be technically justified overall to achieve the claimed benefits but lacks documentation that demonstrates the technical adequacy of the projects and physical benefits are not well described. Project 1 which has 10 components (sub projects) does not address how the proposed recycled water conveyance system will receive tertiary treated effluent. The application states that each of the wastewater treatment plants (WWTPs), that will serve the proposed facilities, currently treats to secondary standards. Nowhere in attachment 7 (or in the work plan and budget) does the applicant describe how or when these upgrades will take place. Without the treatment upgrades, no water can be supplied through this new conveyance system, meaning there are zero water supply benefits. For project 6 the Proposal does not sufficiently demonstrate how the project will benefit water quality or reduce flooding. The proposal states "Without this project, the Chollas Creek riparian zone will not be restored and the creek channel will not

be improved to reduce flooding. This leaves the project area (Northwest Village Creek development) vulnerable to flooding, and will hinder the planned development in the neighborhood that is vital to neighborhood revitalization" (Attachment 7, p. 7-69). "Impervious surfaces in the area would remain, so runoff will remain high and contain an excess of pollutants. This runoff would continue to contribute to degradation of Chollas Creek water quality" (Attachment 7, p.7-70). "In addition to the avoided flood damage to existing properties (only 1705 sq ft) this project will provide flood protection for the planned (1.7 million sq ft) development in the area at the Village at Market Creek" (Att. 7, p.7-74). It is unclear if this project is for the benefit of the Creek or for the benefit of the planned future development.

BENEFITS AND COST ANALYSIS

Collectively the proposal is likely to provide a medium level of benefits in relationship to cost, but the quality of the analysis or clear and complete documentation is lacking.

The total net present value (NPV) costs for the Proposal are $33,914,227. The applicant estimates the Proposal's total monetized benefits to be $342,095,615 with low level of certainty. Many of these benefits are not well supported. This application includes two projects focused on recycled water (projects 1 and 4). Project 1 accounts for most of the application NPV cost. This does not account for the cost to upgrade the wastewater treatment plant to tertiary treatment costs, which should have been included. Exclusion of tertiary treatment costs in the largest project makes unclear about the total real cost, and the risk that the dedicated delivery of recycled water to avocados might be non-economical.

Project 1 benefits include the calculation of avoided imported water costs that assumes Metropolitan Water District water rates will increase annually (in real terms) by 3.5% through 2020. Beyond 2020, a 1.5% increase in water rates is assumed. Most water would go to avocado producers, but it's not clear that California avocado producers will be able to afford their share of the recycled water at this assumed "price" in the future. Project 4 would help make progress toward direct reuse of potable water; a project with potential large benefits for the entire State.

Project 3 is focused on small DAC potable water systems, but the exact projects to be funded are not specified. Two projects are focused on watershed and riparian restoration, and one project seeks to develop water quality standards through a collaborative project. This project could have statewide benefits as an example project; but claimed economic benefits are speculative.

PROGRAM PREFERENCES

Applicant claims that six program preferences and eight statewide priorities will be met with project implementation. However, applicant demonstrates high degree of certainty and adequate documentation for eight of the preferences claimed: (1) Include regional projects or programs; (2) Effectively integrate water management programs and projects; (3) Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program; (4) Drought Preparedness; (5) Use and Reuse Water More Efficiently; (6) Climate Change Response Actions; (7) Expand Environmental Stewardship; and (8) Protect Surface Water and Ground Quality.